



North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary

January 11, 2005

Mr. Neil Emory, County Manager
County of Harnett
P.O. Box 759
Lillington, North Carolina 27546

Subject: Solid Waste Permit No. 43-03: Permit to Operate - Phase 1 and 2A
Harnett County - Anderson Creek Construction and Demolition(C&D) Landfill
Barbecue Township, Lillington, Harnett County, North Carolina.

Dear Mr. Emory:

The referenced PERMIT TO OPERATE is issued in accordance with N.C.G.S. 130A-294 and the N.C. Solid Waste Management Rules, 15A NCAC 13B, .0201(b)(1)&(2) and .203(c)&(d). Enclosed is a list which identifies documents included in the Approved Plan. The approved facility description includes the area described in the attached legal description, as part of this Permit to Operate. Within the approved facility, the area identified for this Permit to Operate is Phase 2A, consistent with drawing CT16DE04.DWG dated 21 December 2004 "Partial Grade Certification" by Streamline Land Surveying, Inc..

This permit is for the operation of the five-year phase, Phase 2, consistent with the drawings noted in the Permit to Construct. At the end of the five-year operational period, Harnett County may apply for an expansion into and construction of future phases, if required, but will be subject to all rules in effect at that time. This permit is issued to Harnett County as the owner and operator of the facility.

Please refer to the GENERAL CONDITIONS of this permit for the definition of the approved plan, and for general terms of the Solid Waste Permit. The CONSTRUCTION AND OPERATION conditions describe permitted fill areas, acceptable waste types, landfill operation, and requirements which must be satisfied prior to operation of the facility as a Construction & Demolition landfill. Specific requirements for groundwater monitoring and facility record keeping and reporting are described in the MONITORING AND REPORTING conditions.

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Phone 919-733-0692 \ FAX 919-733-4810 \ Internet <http://wastenotnc.org>

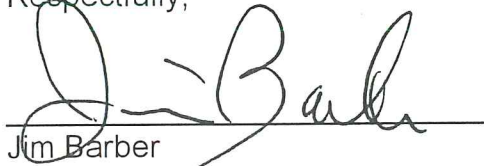
Mr. Emory
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Please review the Conditions of Permit thoroughly, especially the following specific conditions:

- A. Monitoring and Reporting Requirement No. 12(e) requires that the groundwater quality monitoring wells must be installed and sampled prior to accepting waste at this landfill. Please consult with Ms. Ellen Lorscheider, Solid Waste Section Project Hydrogeologist at (919) 733-0692, Ext. 345 just prior to well construction to help ensure that completed wells meet well construction standards and will be acceptable for monitoring purposes.

Again, please review the Conditions of Permit thoroughly and contact me if you have any questions or if you require further clarification. Mr. Dennis Shackelford is the Solid Waste Section Waste Management Specialist for this area and can be contacted at the DENR Fayetteville Regional Office by phone at (910) 486-1541 ext: 749. Jim Barber can be contacted at the Raleigh Central Office at (919) 733-4996 Extension 255.

Respectfully,



Jim Barber
Permitting Branch Supervisor
Solid Waste Section
Division of Waste Management

cc: John Crowder
Dennis Shackelford
Ellen Lorscheider
Raleigh Central File: Harnett County - Anderson Creek Landfill; 43-03 Permit File
C.T. Clayton, Sr., P.E., Inc.
3100 Hwy. 27 East
Coats, N.C. 27521

PERMIT NUMBER:	98-09 ?
DATE ISSUED(ptc/phase 1):	12/11/96
DATE ISSUED(pto/phase 1):	04/17/97
DATE ISSUED(ptc/phase 2):	10/18/04
DATE ISSUED(pto/phase 2A):	01/11/05

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
1646 MAIL SERVICE CENTER; RALEIGH, NC 27699-1646

SOLID WASTE PERMIT

COUNTY OF HARNETT - LANDOWNER

is hereby issued a PERMIT TO CONSTRUCT a
Construction and Demolition Landfill, PHASE 2 of the
ANDERSON CREEK CONSTRUCTION AND DEMOLITION LANDFILL

located on the closed Harnett County-Anderson Creek MSW landfill property, accessed via S.R. 1146 in the **Barbecue Township**, Lillington, Harnett County, North Carolina in accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and all rules promulgated thereunder and subject to the conditions set forth in this permit. The facility is located on a recombined property totaling 153.01 acres and is described by the legal description of the site included with this permit and further identified in **PLAT CABINET: F & SLIDE: 593A** and deeds recorded for this property in the Harnett County Register of Deeds office in the following; **Book:621 & Page: 166, Book: 932 & Page: 630, Book: 879 & Page: 316 and Book: 880 & Page: 48.**



Donald J. Barber
Permitting Branch Supervisor
Solid Waste Section
Division of Waste Management

PERMIT NUMBER:	43-03
DATE ISSUED(ptc/phase 1):	12/11/96
DATE ISSUED(pto/phase 1):	04/17/97
DATE ISSUED(ptc/phase 2):	10/18/04
DATE ISSUED(pto/phase 2A):	01/11/05

SOLID WASTE PERMIT
PERMIT TO OPERATE: HARNETT COUNTY - ANDERSON CREEK
Construction and Demolition Debris Landfill Unit - PHASE 1 AND 2A

CONDITIONS OF PERMIT:

GENERAL

1. This PERMIT TO CONSTRUCT will be in effect for eighteen months from date of issuance and may be reviewed under rules in effect at that time if the facility is not constructed within this time frame. Modifications to the facility may be required in accordance with rules in effect at the time of review. This permit shall not be effective unless the PERMIT TO CONSTRUCT along with the certified copy is filed in the Register of Deeds Office, in the grantor index under the name of the owner of the land in the county or counties in which the land is located. The certified copy shall be returned to the Solid Waste Section and shall have indicated on it the page, book number, date of recordation and the Register's seal. **This Permit to Construct shall be referenced against the deeds identified on the permit page.**

When this property is sold, leased, transferred or conveyed, the deed or other instrument of transfer shall contain in the description section in no smaller type than that used in the body of the deed or instrument, a statement that the property has been used as a sanitary landfill.

2. The approved plan is described by the "List of Documents for Approved Plan". Where discrepancies may exist, the most recent submittal and the Conditions of Permit shall govern. Some components of the approved plan are reiterated in the Conditions of Permit.
3. This permit is not transferable.
4. This permit is for a period of five years from the date of the PERMIT TO OPERATE and is subject to review on or before the date of the PERMIT TO OPERATE as per 15A NCAC 13B .0201(c). Modifications to the facility may be required in accordance with the rules in effect at the time of the review.
5. The service area for this facility is Harnett County, consistent with the resolution by the Harnett County Board of Commissioners on 17 May 2004. The disposal capacity for PHASE 2 is approximately 66,440 tons (page 6 of 17, section 3.2 - Landfill Capacity) consistent with the Closure Contours as shown on Drawing No. C-5 in the construction application.

The operational capacity is based the receipt of 15,000 tons/year, with a maximum variance in accordance with GS 130A-294(b1)(1), consistent with the approved resolution by the Harnett County Board of Commissioners dated 17 May 2004.

OPERATION:

6. This permit is for the operation of the Harnett County - Anderson Creek Construction and Demolition(C&D) Landfill unit denoted as Phase 2A, in accordance with the as-built survey drawing CT16DE04.DWG dated 21 December 2004 "Partial Grade Certification" by Streamline Land Surveying, Inc.. Prior to placing waste in the remaining footprint of Phase 2, consistent with the approved construction drawings, certification that the remainder of Phase 2 has been constructed and graded in accordance with the approved construction plans will be required.
7. All sedimentation/erosion control activities will be conducted in accordance with the Sedimentation Control Act codified at 15 NCAC 4. Native vegetation shall be established on the completed C&D landfill unit in accordance with 15A NCAC 13B .0505 (3)(b)(c).
8. The following requirements shall be met prior to operation of PHASE 2 (i.e. Prior to the issuance of a PERMIT TO OPERATE):
 - a. Construction of PHASE 2 shall be in accordance with the construction plan, drawing No. C-3, "Existing Conditions" and drawing C-4 "Proposed Base Grade" dated 29 July 2004 and the conditions specified herein. Phase 2 shall be certified by the design engineer to be constructed in accordance with the approved plans prior to the issuance of the Permit to Operate.
 - b. PHASE 2 inspection shall be made by a representative of the Division of Waste Management (DWM) with the owner/operator.
 - c. Signs shall be posted at the entrance of the Harnett County - Anderson Creek landfill, in accordance with the Access and Safety Requirements under Operation Condition .0505(8).
 - d. Groundwater monitoring wells (see Monitoring and Reporting Requirements) shall be installed consistent with condition 14(a) thru (g). A baseline sampling for water quality shall be performed. Well construction records, soil boring logs and sample analysis results shall be submitted to the Section Hydrogeologist for review and approval prior to operation of the C&D unit.
 - e. Inspection and certification of the PHASE 2 subgrade, by the project hydrogeologist, to determine if subgrade conditions are consistent with the observations made during the initial site investigations and information provided in the site hydrogeology report. If conditions found are different than conditions stated in the hydrogeologic report or that would impact or have an effect on the proposed ground water monitoring system; then a revised ground watering monitoring plan will be required.
 - f. All well construction records and soil boring logs(for existing and new wells), along with sample analysis results shall be submitted to the Section Hydrogeologist for review and approval prior to operation of the C&D unit.

9. This C&D unit (PHASE 1 and Phase 2a) is permitted to receive the following waste types:

- a. Land-clearing debris as defined in G.S. 130A-290, specifically, solid waste which is generated solely from land-clearing activities, such as stumps, trees;
- b. Inert debris defined as solid waste which consists solely of material that is virtually inert, such as brick, concrete, rock and clean soil; and
- c. Asphalt in accordance with G.S. 130-294(m).
- d. Construction and demolition debris defined as solid waste resulting solely from construction, remodeling, repair or demolition operations on pavement, buildings, or other structures.

Yard trash as defined in G.S. 130A-290, shall not be disposed in the landfill area. However, yard trash, along with land-clearing debris, may be accepted for processing in the Yard Waste Composting Area or disposed of in a LCID landfill.

10. Operation of the C&D landfill unit shall conform to the operating procedures described in the approved plan, in accordance with Section .0505 of the Solid Waste Management Rules, and in accordance with the following requirements: Waste Acceptance and Disposal.

- a. The C&D unit shall accept only those solid wastes which it is permitted to receive as outlined in condition 9.
- b. No municipal solid waste, hazardous waste, or liquid waste shall be accepted for disposal in the C&D unit.
- c. The permittee shall implement a program for the C&D unit for detecting and preventing the disposal of MSW, hazardous or liquid wastes. The program shall include, at a minimum:
 - (I) Random inspections of incoming loads or other comparable procedures;
 - (ii) Records of any inspections;
 - (iii) Training of personnel to recognize hazardous and liquid wastes;
 - (iv) Development of a contingency plan to properly manage any identified hazardous, liquid or MSW wastes; The plan must address identification, removal, storage, and final disposition of waste.

Cover Material Requirements

- d. Operational soil cover of at least six inches shall be placed at least once per week or when the active area reaches $\frac{1}{2}$ acre in size, or more often as necessitated by the nature of the waste, as to prevent the site from becoming a visual nuisance and to prevent fire, windblown materials, vectors, or excessive water infiltration.
- e. Areas which will not have additional waste placed on them for 12 months or more, but where final termination of operations has not occurred, shall be covered with a minimum of one foot of soil cover [15A NCAC 13B .0505(3)(b)].

- f. After final termination of disposal operations at the C&D unit or major part thereof, or upon revocation of a permit, the fill areas shall be covered with at least two feet of suitable compacted earth [15A NCAC 13B .0505(3)(c)] or a cap as specified by the rules in effect at the time of closure.

Access and Safety

- g. The C&D unit shall be adequately secured by means of gates, chains, berms, fences, or other security measures approved by the DWM to prevent unauthorized entry.
- h. An attendant shall be on duty at the Harnett County - Anderson Creek landfill at all times while it is open for public use to ensure compliance with operational requirements.
- i. The access road from S.R. 1146 to the C&D unit shall be of all-weather construction and maintained in good condition.
- j. Dust control measures shall be implemented when necessary.
- k. Signs providing information on dumping procedures, the hours of operation, the permit number, and other pertinent information shall be posted at the entrance to the Wilson County landfill.
- l. Signs shall be posted stating that no MSW, hazardous waste or liquid waste can be received in the C&D unit.
- m. Traffic signs or markers shall be provided as necessary to promote an orderly traffic pattern to and from the discharge area and to maintain efficient operating conditions.
- n. The removal of solid waste from the facility is prohibited unless the owner/operator approves and the removal is not performed on the working face. If C&D recycling is to take place in the future; amendment of the operations plan shall be submitted to the Solid Waste Section for approval.
- o. Barrels and drums shall not be disposed of unless they are empty and perforated sufficiently to ensure that no liquid or hazardous waste is contained therein, except fiber drums containing asbestos. Asbestos waste shall be managed in accordance with 40 CFR 61.
- p. Open burning of solid waste is prohibited. Fires shall be reported to the Solid Waste Section by phone within 24 hours of an incident and written notification shall be submitted within 14 working days addressing the events at the site and future actions to be taken in the future to avoid and or mitigate potential fire hazards.
- q. The concentration of explosive gases generated by the C&D unit shall not exceed:
 - i. twenty-five percent of the lower explosive limit(1.25% of CH₄) for gases in site structures (excluding gas control or recovery system components if necessary; and
 - ii. One hundred percent of the lower explosive limit(5% CH₄) for gases at the property boundary. Installation of permanent gas monitoring wells may be required in the future to demonstrate compliance.

Erosion and Sedimentation Control

- r. Adequate sedimentation and erosion control measures shall be practiced to prevent silt from leaving the site of the C&D unit.
- s. Adequate sedimentation and erosion control measures shall be practiced to prevent excessive on-site erosion.
- t. Provisions for a vegetative ground cover sufficient to restrain erosion must be accomplished within 30 working days or 120 calendar days upon completion of any phase of C&D landfill unit development or as addressed in the approved Sedimentation and Erosion Control permit.

Drainage Control and Water Protection Requirements

- u. Surface water shall be diverted from the operational area.
 - v. Surface water shall not be impounded over or in waste.
 - w. A separation distance of at least four feet shall be maintained between the C&D waste and the groundwater table; as addressed in the site suitability application, hydrologic assessment section.
 - x. Solid waste(C&D) shall not be disposed of in water.
 - y. Leachate shall be contained on site or properly treated prior to discharge. An NPDES permit may be required prior to discharge of leachate to surface waters and or for land disturbing activities greater than one acre.
11. All pertinent landfill operating personnel will receive training and supervision necessary to properly operate this C&D landfill unit in accordance with G.S. 130A-309.25 and addressed by memorandum dated 29 November 2000(enclosed).
12. Ground water quality for the C&D landfill unit is subject to the classification and remedial action provisions referenced in Rule .0503 (2)(d) of 15A NCAC 13B.
13. A closure and post-closure plan must be submitted for approval at least 90 days prior to closure or partial closure of any landfill unit. The plan must include all steps and measures necessary to close and maintain the C&D unit in accordance with all rules in effect at that time. At a minimum, the plan shall address the following:
- a. Design of a final cover system as required by the solid waste management rules in effect at the time of closure;
 - b. Construction and maintenance/operation of the final cover system and erosion control structures;
 - c. Surface water, ground water, and explosive gas monitoring.

MONITORING AND REPORTING REQUIREMENTS

14. Ground-water monitoring wells and monitoring requirements for the C&D landfill unit:
- a. Monitoring well design and construction shall conform to the specifications outlined in, "North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities-DRAFT" and water quality sampling and analysis shall be done in accordance with Construction and Demolition landfills and Closed Sanitary Landfills

- b. A total of six locations for ground water wells MW-1, CDMW-1, CDMW-2, CDMW-3, CDMW-5 and CDMW-6 (locations for Phase I and 2) as approved in the "Water Quality Monitoring Plan", dated 30 November 2004, submitted by C.T. Clayton, P.E., Robert H. Livermon, P.G. and Chaim J. Poran, PhD.
 - c. A geologist shall be in the field to supervise well installation. The exact locations, screened intervals, and nesting of the wells shall be established after consultation with the SWS Hydrogeologist at the time of well installation.
 - d. For each monitoring well constructed, a well completion record shall be submitted to DWM within 30 days upon completion.
 - e. Prior to the acceptance of any waste at the C&D unit, a baseline sampling event shall be completed and analysis submitted to the SWS Hydrogeologist.
 - f. Sampling equipment, procedures, and parameters shall conform to specifications outlined in the above-referenced guidance document, [Monitoring and Reporting Requirements, condition 14(a) pg. 9] or the current guidelines established by DWM at the time of sampling.
 - g. In order to determine ground-water flow directions and rates, each monitoring well shall be surveyed, and hydraulic conductivity values and effective porosity values shall be established for the screened intervals for each monitoring well.
 - h. The permittee shall sample the monitoring wells semi-annually or as directed by the SWS Hydrogeologist.
 - i. A readily accessible unobstructed path shall be initially cleared and maintained so that four-wheel drive vehicles may access the monitoring wells at all times.
15. The permittee shall maintain a record of all monitoring events and analytical data. Reports of the analytical data for each water quality monitoring sampling event shall be submitted to DWM in a timely manner.
16. The permittee shall maintain a record of the amount of solid waste received at the C&D unit, compiled on a monthly basis. Scales shall be used to weigh the amount of waste received.
17. On or before 01 August 2005, and each year thereafter, the permittee shall report the amount of waste received (in tons) at the C&D unit and disposed of in the C&D landfill unit to the Solid Waste Section and to all counties from which waste was accepted, on forms prescribed by the Section.
This report shall include the following information:
- a. The reporting period shall be for the previous year, beginning 01 July and ending on 30 June;
 - b. The amount of waste received and landfilled in tons, compiled on a monthly basis, and;

- c. Documentation that a copy of the report has been forwarded to all counties from which waste was accepted.
- 18. All records shall be maintained on-site and made available to the SWS upon request, specifically records generated by conditions 10, 11, 13, 14, 15, 16 & 17.

County of Harnett - Anderson Creek
List of Documents for the Approved Plan

Phase 1

1. Site and Construction Plans/Application for Harnett County-Anderson Creek Landfill, Construction and Demolition Landfill Phase 1(Cells 1&2).
2. Response to Completeness Review, letter dated 30 November 1996 to the Solid Waste Section, received 30 November 1996.
3. Erosion and Sedimentation Control Plan approval letter dated 18 November 1996.
4. Zoning letter dated 26 November 1996 to McKim & Creed.
5. Land Use Permit dated 5 December 1996 to Jerry Blanchard.
6. Sampling and Analysis requirements for Construction/Demolition Landfills and Closed Sanitary Landfills.
7. Document dated 21 March 1997 with the Design Engineers Construction Certification that the facility was constructed in accordance with the approved plans and a request to operate cells 1,2, & 3 for Phase I. Also, with this document are the second sampling results for the baseline sample.

Phase 2

SITE SUITABILITY:

8. Site Application - HARNETT COUNTY - ANDERSON CREEK C&D LANDFILL FACILITY application dated September 2004 and received 30 September 2004 from C.T. Clayton, Sr., P.E..

Permit to Construct:

9. CONSTRUCTION AND DEMOLITION LANDFILL PERMIT APPLICATION for ANDERSON CREEK CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL ADDITION (PHASE II) dated 29 September 2004, received on 30 September 2004.
10. Letter dated 4 November 2004 addressing piezometer abandonment at the Anderson Creek landfill.

PERMIT TO OPERATE:

11. Letter dated 4 November 2004 addressing piezometer abandonment.
12. Groundwater monitoring plan dated 30 November 2004, received 16 December 2004.
13. Letter dated 21 December 2004 addressing construction of Phase 2A, a 1.35 acre area of Phase 2, and a as-built drawing dated 21 December 2004 indicating construction grades.